

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0006] as follows.

a1 [0006] System 100 also has a drawback in that most applications of system 100 require a relatively large distance between lens 150 and image plane 170. For example, when object 110 is a stage for a wafer in an integrated circuit fabrication device, the clearance between object 100 and lens 150 needs to be about 19 mm or more, which leads to an object distance of about 19 mm or more. Additionally, with a reasonable size grating (e.g., a 10 μ m pitch), detectors 180 require a magnification of 9x or more of the grating pitch to allow measurement of the phase of periodic intensity distribution 175. The clearance and magnification requirements result in a total optical path length of about 200 mm between the object and the image. A 200 mm long measuring device is often too large in space critical systems such as many typical integrated circuit fabrication equipment.

Please amend paragraph [0021] as follows.

a2 [0021] Lens 252 has its object (i.e., grating 120) in the focal plane of aspheric lens 252, and a spatial filter 260 passes only the reflected light corresponding to the first order maxima of grating 120. The object for aspheric lens 254 is the image that aspheric lens 252 forms at infinity using light from the first order maxima. Accordingly, a subsystem including aspheric lenses 252 and 254 ~~as a subsystem~~ has an image in the focal plane of aspheric lens 254 and provides minimal spherical aberrations in that image.